

Monday, March 17, 1997
ALH 84001: CARBONATES AND LIFE (?)
8:30 a.m. Room B

**Chairs: D. W. Mittlefehldt
T. D. Swindle**

McKay G. A.* Lofgren G. E.
Carbonates in ALH84001: Evidence for Kinetically Controlled Growth

Treiman A. H.*
Chemical Disequilibrium in Carbonate Minerals of Martian Meteorite ALH 84001: Inconsistent with High Formation Temperature.

Scott E. R. D.* Yamaguchi A. Krot A. N.
Shock Melting of Carbonate, Plagioclase, and Silica in the Martian Meteorite ALH84001

Kirschvink J. L. Maine A.* Vali H.
Paleomagnetic Evidence Supports a Low-temperature Origin of the Carbonate in Martian Meteorite ALH 84001

Greenwood J. P.* Riciputi L. R. McSween H. Y. Jr.
Sulfur Isotopic Variations in Sulfides from Shergottites and ALH 84001 Determined by Ion Microprobe: No Evidence for Life on Mars

Valley J. W.* Eiler J. M. Graham C. M. Gibson E. K. Jr. Romanek C. S.
Ion Microprobe Analysis of Oxygen and Carbon Isotope Ratios in the ALH 84001 Meteorite

Gilmour J. D. Lyon I. C. Saxton J. M. Turner G.* Whitby J. A.
Oxygen and Noble Gas Isotope Constraints on the Origin of ALH84001 Carbonate

Gibson E. K. Jr.* McKay D. S. Thomas-Keprta K. Romanek C. S. Clemett S. J. Zare R. N. Vali H.
Possible Relic Biogenic Activity in Martian Meteorite ALH84001: A Current Assessment

Westall F.* de Wit M. J. Dann J.
What Do Fossil Bacteria Look Like? Examples of 3.5 Billion-year Old Mineral Bacteria and the Search for Evidence of Life in Extraterrestrial Rocks

Thomas-Keprta K. L. Wentworth S. J.* McKay D. S. Stevens T. O. Golden D. C. Allen C. C. Gibson E. K.
The Search for Terrestrial Nanobacteria as Possible Analogs for Purported Martian Nanofossils in the Martian Meteorite ALH84001

Steele A.* Goddard D. T. Stapleton D. Smith J. Tapper R. Grady M. McKay D. S. Gibson E. K.
Thomas-Keprta K. L. Beech I. B.
Atomic Force Microscopy Imaging of ALH84001 Fragments

Wright I. P.* Grady M. M. Pillinger C. T.
An Investigation into the Association of Organic Compounds with Carbonates in ALH 84001

Flynn G. J.* Keller L. P. Kirz J. Wirick S. Bajt S. Chapman H. N.
Carbon Mapping and Carbon-Xanes Measurements on Carbonate Globules from ALH 84001